

Claims

- [c1] 1. A method for performing input/output (I/O) flooring planning on an integrated circuit design, said method comprising:
 - collecting user design data related to I/O circuits associated with each package pin;
 - sorting said collected user design data according to operating conditions;
 - choosing an I/O behavioral model and a package model based on said sorted data;
 - dynamically building a simulation deck with appropriate operating conditions; and
 - performing simulation through a circuit simulator using said chosen I/O behavioral model and said operating conditions.
- [c2] 2. The method of Claim 1, wherein said method further includes dynamically analyzing simulation results based on user defined criteria.
- [c3] 3. The method of Claim 1, wherein said collecting further includes collecting design specification from a customer's environment condition.
- [c4] 4. The method of Claim 1, wherein said sorting further includes sorting said collected user design data according to frequency of operation of I/O circuits.

- [c5] 5. A system for performing input/output (I/O) flooring planning on an integrated circuit design, said system comprising:
- means for collecting user design data related to I/O circuits associated with each package pin;
 - means for sorting said collected user design data according to operating conditions;
 - means for choosing an I/O behavioral model and a package model based on said sorted data;
 - means for dynamically building a simulation deck with appropriate operating conditions; and
 - means for performing simulation through a circuit simulator using said chosen I/O behavioral model and said operating conditions.
- [c6] 6. The system of Claim 5, wherein said system further includes means for dynamically analyzing simulation results based on user defined criteria.
- [c7] 7. The system of Claim 5, wherein said means for collecting further includes means for collecting design specification from a customer's environment condition.
- [c8] 8. The system of Claim 5, wherein said means for sorting further includes means for sorting said collected user design data according to frequency of operation of I/O circuits.
- [c9] 9. A computer program product residing on a computer usable

medium for performing input/output (I/O) flooring planning on an integrated circuit design, said computer program product comprising:

program code means for collecting user design data related to I/O circuits associated with each package pin; program code means for sorting said collected user design data according to operating conditions; program code means for choosing an I/O behavioral model and a package model based on said sorted data; program code means for dynamically building a simulation deck with appropriate operating conditions; and

program code means for performing simulation through a circuit simulator using said chosen I/O behavioral model and said operating conditions.

- [c10] 10. The computer program product of Claim 9, wherein said computer program product further includes program code means for dynamically analyzing simulation results based on user defined criteria.
- [c11] 11. The computer program product of Claim 9, wherein said program code means for collecting further includes program code means for collecting design specification from a customer's environment condition.
- [c12] 12. The computer program product of Claim 9, wherein said

program code means for sorting further includes program code means for sorting said collected user design data according to frequency of operation of I/O circuits.